

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

Claims 1-9 (Canceled).

10. (New) A radio base station apparatus comprising:

a receiver that receives a code multiplexed signal including signals from a plurality of communication terminals;

an adaptive array antenna processing section that performs adaptive array antenna processing on the code multiplexed signal;

a multi-user type interference canceller that generates a replica signal corresponding to the plurality of communication terminals and performs interference cancellation on the signal processed by the adaptive array antenna, using said replica signal; and

a calculator that uses a difference between the signal processed by the adaptive array antenna and the replica signal as an error signal and calculates a weight for use in the adaptive array antenna processing section.

11. (New) The radio base station apparatus of claim 10, wherein the calculator divides the plurality of communication

terminals into a plurality of groups according to arrival directions of individual signals from said plurality of communication terminals and calculates a weight per group.

12. (New) A radio communication method comprising:

(a) receiving a code multiplexed signal including signals from a plurality of communication terminals;

(b) performing adaptive array antenna processing on the code multiplexed signal;

(c) generating a replica signal corresponding to the plurality of communication terminals and performing interference cancellation on the signal, on which the adaptive array antenna processing has been performed, using said replica signal; and

(d) using a difference between the signal, on which the adaptive array antenna processing has been performed, and the replica signal as an error signal and calculating a weight for use in step (b).